

Water Quality Team Meeting Notes

June 14, 2005

1. Greetings and Introductions.

The June 14 meeting of the Water Quality Team was chaired by Mark Schneider and facilitated by Robin Harkless, who led a round of introductions and a review of the agenda. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes is invited to contact Kathy Ceballos at 503/230-5420.

2. Implementation Team Long-Term Work Planning.

Rock Peters said that, as the WQT is aware, the Implementation Team has been re-examining how it does business, and how it can be more effective in the future. In general, at the moment, the IT is primarily a reactionary group – issues arise from TMT SCT and WQT, and the IT attempts to resolve them. Recently, the IT has begun to be more forward-thinking, on issues such as kelts and marine mammal management. The recent BiOp laid out a series of studies, said Peters, but the pathway into the future isn't all that clear.

What IT has done is to start to compile a list of projects that need additional action, Peters said. One of those issues is fall chinook management; another is kelt management. We would like to take a more strategic approach in identifying key questions that need to be addressed, he explained. The IT will then be able to assign areas of emphasis to, for example, SCT, to get at some of those key questions. We're trying, for example, to get fall chinook into the AFEP process. We are also developing timelines for each of these issues, and to build accountability into the decision process, he added.

I would say that communication between the technical and policy groups is another area that should be improved and emphasized, Schneider said. In response to a question, Peters said the list of potential issues that is being developed by John Palensky should be available in the next two weeks or so. Peters noted that, in recent months, IT meetings have not been as well-attended as the action agencies would like; he asked the tribes, in particular, to try to send representatives to future IT meetings. Schneider said he will track this process as it develops, and will schedule further updates as appropriate.

3. Lower Columbia River TDG Management Concept.

Peters said the Camas/Washougal issue has been going on for many years. One

of the issues is that we're doing a lot of restoration projects in the estuary – at least six. One of the things we're looking at, from a water quality perspective, is, what do we want the estuary to look like, in terms of water quality? We focus so much on spill that we don't often consider the issue of what sort of water quality parameters we want to manage for. We need to protect chum, for one thing, Peters said. But we want to be sure that we don't cause problems for fish and other aquatic biota.

I'm not sure what the issues associated with these restoration projects, said Margaret Filardo. Gas is one issue, because we'll be putting gas into critical shallow-water restoration areas at certain times of the year, Peters replied. We need to talk about what we need to monitor and when we need to monitor it, he said. Gary Fredricks said he had asked Blaine Edwards to put together a one-pager to address the shallow water habitat restoration areas, including a bioassay of these areas. We also have a one-pager that addresses gas levels at chum redds, at least down to the I-205 bridge, he said. Hopefully those two one-pagers will address at least the shallow water habitat restoration and TDG issues in the estuary, Fredricks said. One question is the influence of upwelling on the redd sites, he added; if monitoring shows that there is extensive upwelling in the spawning areas, then we may not really have a problem.

Are we going to be looking at the Camas/Washougal monitoring site, and how and where we should be monitoring the reach below Bonneville, for the purposes of TDG management? Filardo asked. To me, the question is, what kind of monitoring do we need to ensure safe conditions in the shallow water habitat areas downstream of Bonneville? Peters replied. Another participant suggested that it makes sense, to him, to place a fixed monitoring station midway between the two main chum spawning sites, with data collected in real time.

Schneider distributed a list of the six estuary habitat restoration projects the Corps currently has underway. John Picininni noted that BPA is funding a number of projects monitoring juvenile passage through the estuary. We have some questions about the effects of Bonneville operations on the validity of the results from these passage studies, he said. It's really a two-pronged question, Filardo observed. The Camas/Washougal gauge was included in a waiver in the early 1990s to function, essentially, as the next forebay downstream from Bonneville, she said. The first question is, would it be better to measure TDG below Bonneville at Camas/Washougal, or at the Bonneville tailwater gauge, in order to manage spill at Bonneville? The second question is, if you're not managing spill using the Camas/Washougal gauge, should that gauge be kept in place for other reasons, such as serving as a surrogate for TDG levels at other sites downstream?

Schneider noted that his intent, in inviting Peters to today's meeting, was to ask him to look at Lower Columbia water quality goals from a larger perspective. If we can answer some of those fundamental questions about our goals in the estuary, I think we'll be able to answer the Camas/Washougal question, he said. Fredricks noted that, as the person who originally picked the Camas/Washougal site back in 1995, he has

some history on this issue; in hindsight, that probably wasn't the most appropriate site. Again, the question to me is, what's happening at the spawning sites, in terms of upwelling? Fredricks said. If monitoring shows that upwelling is greater than originally thought, it could be that we don't really have an estuary TDG problem, and that we have been limiting spill at Bonneville for no reason. And again, there is a one-pager designed to get an answer to that question; the SCT will be making a funding decision on that study soon.

I would like to make sure that the group gets to closure on the larger question of the lower river habitat area, and how we should be dealing with that, from a water quality perspective, Schneider said. That will include, but is not limited to, dissolved gas. It sounds as though what you're talking about, essentially, is a water quality management plan for the region below Bonneville, Fredricks observed.

Fredricks said that, while he feels there would be value in going out and looking, he would be very surprised if researchers discover that there is a dissolved gas problem, caused by Bonneville, in the estuary. If the Corps is concerned that there is a problem, then by all means, we should go check, he said.

Again, the Corps is interested in developing a water quality management plan for the estuary, said Peters. Just thinking out loud, if we do develop a plan and conduct monitoring, and find, say, a TDG problem at Sandy Bar, that may have an impact on our thinking, in terms of Bonneville operations and what's best for fish. The effects of the B2 corner collector, for instance, are not picked up at the Cascade Island monitoring station. How do we deal with that? he asked.

After a few minutes of additional discussion, Harkless suggested that the WQT focus, initially, on the lower river sites where monitoring needs to occur. Perhaps we could generate a prioritized list of sites, or even begin discussing a monitoring plan, she said. There was general agreement that this would be useful.

The discussion turned to the B2 corner collector; Agnes Lut observed that it is difficult for her to understand how a project that was installed in 2004 could have been designed in such a way that it increases dissolved gas below Bonneville. Fredricks replied that it is his fault, because he insisted on a 50-foot plunge pool. Lut said the state water quality agencies plan to discuss the corner collector with the action agencies soon; obviously, some structural modifications are needed at that facility.

Harkless said that, in terms of next steps, the WQT will need to begin to focus on a monitoring program below Bonneville; in particular, where the concerns are and which sites would be most appropriate for monitoring. Picininni said that he will bring a list of BPA-funded projects to the next WQT meeting. There was general agreement that it would be useful to revisit this issue at the August WQT meeting. We should also take a look at what the Lower Columbia River Estuary Program (LCREP) is doing, Peters observed.

4. Evaluate Spawning of Chinook and Chum Salmon Just Below the Four Lowermost Columbia River Mainstem Dams.

Wills noted that this project involves a diverse group of people from a variety of agencies; he asked what Schneider would like to have come out of this agenda item. I believe one of the subtasks of this effort is to focus on the area below Bonneville, Schneider said; that's probably of the most interest to this group. It's also an example of the type of project we might use as a springboard in the development of the estuary water quality management plan, he said.

Joe Skalisky of the Fish and Wildlife Service said USFWS first got involved in this effort in 1997; at that time, there were no fall chinook or chum spawning below Bonneville, or so we thought. It was more or less accidentally discovered that that was not the case, he said; we then got involved in increasingly-structured habitat and streamflow research below Bonneville. The states of Oregon and Washington got involved, then the USGS, then Battelle. The effort was then expanded to determine whether salmonids were spawning below The Dalles, John Day and McNary; what we discovered that, below each of these dams, there are populations of fall chinook spawning, particularly below John Day.

With respect to the chum and fall chinook spawning below Bonneville, said Skalisky, recent issues that have come up are the effects of load following on the spawning areas downstream, particularly at the I-205 bridge spawning sites, as well as the effects of TDG and compensation depth under various Bonneville operations. The issue at the I-205 sites is usually water depth due to operations at Bonneville and tidal influences; we have seen evidence that, under certain operations, redds are being dewatered. There are no tools or data in any of these areas, however, to obtain the kind of information we need to inform management decisions. We need to do a bathymetric survey at each of the spawning sites, and do some one-dimensional surface elevation model runs to tell us how operations are affecting compensation depths, Skalisky said. At a minimum, we would want to survey all of the known spawning sites, he said.

I know LCREP was talking about bathymetric surveys as well, said Lut – it may be that some of this information is already being gathered. Scott Bettin observed that some existing contracts might be modified to include bathymetric surveys of the known spawning sites. Skalisky noted that USFWS has requested funding for this project through the Council process. Picininni replied that the Council is not very receptive to any additional funding requests at this time. In response to a question, Skalisky said the total of the additional funding requested is about \$70,000.

The group discussed who we be overseeing this project; Bettin suggested that the USFWS contact Mark Shaw at Bonneville. Bettin asked whether it might be possible for USFWS to do some reprioritization within its original \$900,000 budget request; Skalisky replied that it would be possible, but difficult, to do so. In response to another

question, Skalisky said the Fish and Wildlife Service will host a semi-annual coordination meeting with the states, USGS and Battelle to discuss these and other issues.

Schneider said he will contact Mark Shaw regarding this issue.

5. Water Quality Effects on Chum Salmon Spawning, Incubation and Rearing.

This topic was covered during the previous agenda items.

6. Redden Decision Summer Spill Implementation Plans.

Adams said that, as part of the Redden decision, summer spill operations are going to change. The proposal is to spill from June 20-August 31 at the Lower Snake projects, and from July 1-August 31 at McNary. The Corps is developing an implementation plan for this operation; the basic goal is to spill water up to the gas cap at each project, while maintaining the minimum generation (station service) requirements at each project. We will need to set spill caps at all of these projects throughout the summer, to ensure that the water quality standards are not exceeded, and that we stay within the water quality parameters allowed under the Oregon and Washington waivers, he explained. That's the Corps' suggested approach, in terms of how to implement Judge Redden's order, said Adams.

In response to a question, Adams said minimum generation requirements are 7.5 Kcfs at Ice Harbor, 9.5 Kcfs at the other three Lower Snake projects, and 50 Kcfs at McNary. Fredricks noted that his understanding is that the station service minimums for each of the Lower Snake projects are 2 Kcfs higher than the above numbers.

Anyway, that's what the Corps is proposing, said Adams; what we'd like to get to today is each agency's position on this proposal. Are you still planning to do RSW testing at Lower Granite and Ice Harbor this summer? Bettin asked. Yes, but that's still under discussion, Adams replied.

Lorz clarified that whatever vote he makes at this meeting, that does not imply the plaintiff's agreement with this proposed operation. I'm not sure "vote" is the right word, Schneider observed – there is some question as to whether those of us in the room today have had adequate opportunity to discuss the Corps' proposal within their agencies. To me, the real question is, based on Judge Redden's order, should the Corps exceed the state TDG waiver limits? said Fredricks. And for us, the waiver limit is the bottom line, said Chris Maynard – we don't want that to be exceeded. And that is the Corps' intent, Adams replied – we are proposing 24 hour-spill 7 days a week, up to the gas cap. In other words, our intent is to limit the volume of spill to keep within the waiver limits. The difficulty, as I understand it, is that the judge's order does not reference TDG, Adams said. Lorz replied that none of the declarations and briefs submitted by the plaintiff asked for spill in excess of the waiver limits.

Essentially, what we're asking for is WQT consensus on our proposal to spill up to the gas caps at each project, Adams said. In response to a question, Adams said it is his understanding that, this Friday, all of the plaintiffs, defendants and other lawsuit participants will be meeting with Judge Redden to clarify issues. Schneider noted that most of this issue is beyond the purview of the WQT, because enforcement of the water quality standards is under the authority of the state water quality agencies. Lut and Maynard agreed.

The discussion continued in this vein for some minutes. Ultimately, the WQT's consensus recommendation was that the Corps spill up to, but not in excess of, the state TDG waiver limits. Schneider added, however, that in his view, it is not necessary for the WQT to be vocal on the subject of TDG, because Judge Redden's order does not mention it, and enforcement of the waiver limits is the responsibility of the state water quality agencies. Lorz reiterated that, in their declarations, the plaintiffs were clear that they were not asking for spill in excess of the state water quality standards. We don't think it's going to be an issue, he said.

Maynard noted that he had put WDOE's position in writing, and asked that it be entered into the record; it includes a recommendation that the Corps take a cautious approach to implementing Judge Redden's order, and work its way up to the 115%/120% waiver TDG limits, rather than shooting for 120% and working downward from an exceedence. Lut said ODEQ agrees with Washington's position. In response to a question from Lut, Adams said the next RSW, intended for Lower Monumental, is now being designed; there are also plans to proceed with RSW design, construction and implementation at Little Goose and McNary, though not necessarily, in that order, as funding is made available.

In response to a question from Dave Zimmer, Adams clarified that, under the Corps' proposal, all river flow at the four Lower Snake projects and McNary in excess of the station service generating requirements will be spilled, up to the TDG waiver limits. Any water over and above that needed for stations service and spill to the gas cap will be used to generate electricity.

7. WQT Guidelines.

Harkless said she will send out copies of the most recent (March 2003) version of the WQT guidelines. She asked whether this is an issue any of the other WQT members feel needs to be addressed, and requested that the WQT membership review the guidelines and provide any comments they may have directly to her. It was so agreed.

8. Next WQT Meeting Date.

The next meeting of the Water Quality Team was set for Tuesday, July 12. Meeting summary prepared by Jeff Kuechle, BPA contractor.